STRATIFICATION WITH SPHAGNUM MOSS

Sphagnum may well be used for seeds that require stratification, which is essentially the growing of seed in a damp medium at low temperature. This treatment will allow the seeds to complete their ripening after being picked, so that germination can occur. Seeds of roses, hollies, magnolias require this treatment before they germinate. The flat is prepared in the usual manner, a thin layer of moss covering the seeds, and placed in a cold, but above freezing location, such as an unheated pit green house or a deep, protected coldframe.

The flat must be protected against mice or other rodents. It will not be necessary, after an initial dampening, to water the flat during the stratification period.

Because the seeds are sown on the surface it will be possible to follow the course of the stratification treatment easily. Most seeds handled in this manner will have germinated the spring following the sowing of the seed. For example, seeds of magnolia sown in November will germinate and be ready to transplant the following spring.

Sphagnum moss is desirable as a medium for fine seeds that have been considered difficult to germinate. Among the woody plants, rhododendrons are a good example of a plant with fine seeds. Perennials such as columbines, primroses, and pinks are also sometimes difficult to germinate. The texture of the sphagnum is such that the tiny seedlings are kept moist during the first stage of development without the frequent waterings that soil requires. Fine seed is best handled by sowing directly on the moss surface, not covering the seed and by placing the flat in an unheated greenhouse in March where the seed will germinate and the plants develop slowly.

The above is quoted directly from Farmer's Bulletin No. 2085 U. S. Department of Agriculture.

SPHAGNUM MOSS

Use granulated moss, or shred the crude moss by rubbing through a wire screen with 3 meshes to inch.

SEED GERMINATION

The moss can be used to fill a flat entirely or an underlying, easily drained soil mixture may be placed in the flat first and covered with three fourth inch of sphagnum. Moss is placed in flat and mounded above the rim. Then it is compressed approximately one half inch below the rim of the flat. The moss is watered thoroughly and allowed to drain. Seeds are then sown, either broadcast or in rows. Fine seed need not be covered; but larger seeds should be lightly covered. When several kinds of seeds are sown in the same flat, separate with a thin layer of dry sand. After the seeds are all sown, the flat should be sprinkled. Use labels with india ink markings for each kind.

Cover the flat with a pane of glass or a glass substitute.

Seed flats prepared in the above manner and placed in a humid location require no further attention until after the seedlings germinate and are ready to be transplanted. However, when dry conditions exist or where seed flats remain for several months before germination commences occasional watering may be necessary.

Transplanting is performed when the seedlings have developed their first true leaves. When there is an excess of seedlings the flat can be held as a form of living storage. Although the seedlings will become stunted and unkempt they will survive as long as four or five years in this condition and at any time during the storage period develop normally when transplanted to soil.

Seedlings in sphagnum moss is one way to overcome losses due to damping off fungi. Diseases caused by these fungi rarely appear in sphagnum seed flats, and the use of fungicides specifically designed for combating these organisims is not necessary. The moss does not require sterilizing prior to use, and is also possible to use a sphagnum seed flat a second time without detrimental effects. After the seedlings have been transplanted the surface may be broken up and a small quantity of fresh sphagnum added. The flat is then ready for further use.